

CLAIMS

We claim:

1. A monoclonal antibody produced by a hybridoma cell line selected from the group consisting of R813, Y88, Y128 and Y474, wherein said monoclonal antibody specifically recognizes the platelet GPIIIa.
2. A monoclonal antibody produced by hybridoma a cell line selected from the group consisting of Y8, Y262, Y291, Y295, Y321, Y458, Y585 and Y700, wherein said monoclonal antibody specifically recognizes the platelet GPIIb-IIIa complex.
3. An IgG Fab, F(ab')₂ fragment, single chain antibody, chimeric antibody, antibody produced by immunization or gene engineering of the monoclonal antibody according to claim 1.
4. An IgG Fab, F(ab')₂ fragment, single chain antibody, chimeric antibody, antibody produced by immunization or gene engineering of the monoclonal antibody according to claim 2.
5. The monoclonal antibody according to claim 1 is produced by a hybridoma cell line R813, CGMCC No. 0740.
6. The monoclonal antibody according to claim 2 is produced by a hybridoma cell line Y262, CGMCC No. 0741.
7. A hybridoma cell line that produces monoclonal antibody that specifically blocks the receptor function of GPIIb-IIIa complex selected from the group consisting of Y262, Y321, Y474 and R813.
8. The hybridoma cell line according to claim 7, which is R813, CGMCC No. 0740.
9. The hybridoma cell line according to claim 7, which is Y262, CGMCC No. 0741.
10. A pharmaceutical composition capable of efficiently inhibiting platelet aggregation comprising one or more monoclonal antibodies that specifically recognizes the platelet GPIIIa or platelet GPIIb-IIIa complex, and a pharmaceutically acceptable carrier or excipient.
11. The pharmaceutical composition according to claim 10, wherein the monoclonal antibody that specifically recognizes the platelet GPIIIa is produced from a hybridoma cell line selected from the group consisting of R813, Y88, Y128 and Y474.
12. The pharmaceutical composition as described in claim 10, wherein the monoclonal antibody that specifically recognizes the platelet GPIIb-IIIa complex is produced from a hybridoma cell line selected from the group consisting of Y8, Y262, Y291, Y295, Y321, Y458, Y585 and Y700.

13. A pharmaceutical composition capable of efficiently inhibiting platelet aggregation comprising monoclonal antibodies produced from hybridoma cell lines R813 and Y262.
14. The pharmaceutical composition according to claim 13, wherein the ratio of monoclonal antibodies produced from hybridoma cell lines R813 and Y262 is 1:1.
- 5 15. A process for preparing a monoclonal antibody recognizing specific epitopes on platelet membrane glycoproteins, comprising the steps of:
 - (1) immunizing a Balb/c mouse using human platelets to obtain a hybridoma cell line that produces anti-platelet antibody;
 - (2) cultivating the hybridoma cell line to obtain a monoclonal antibody;
 - 10 (3) purifying the obtained monoclonal antibody and identifying its epitopes; and optionally digesting the monoclonal antibody and purifying the digested fragment of said monoclonal antibody.